

Noble (Geo. H.)

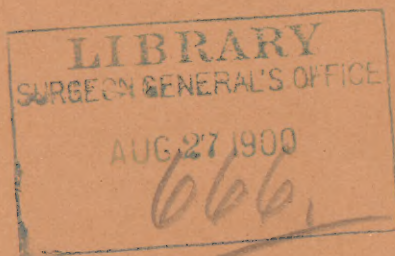
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ONE HUNDRED AND SIXTY-SIX CASES OF CANCER OF THE
PREGNANT UTERUS OCCURRING SINCE 1886.

By GEORGE H. NOBLE, M.D.,

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and Diseases of Women, American Medical Association; Gynecologist
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My attention was turned to this subject by four cases that came under my observation, one of which was the vaginal hysterectomy, post-partum, reported to this Association one year ago; the others, one of which was a vaginal hysterectomy for incipient cancer of the pregnant uterus, were reported to the Atlanta Obstetrical Society some time in the past.

The success in these cases has encouraged me to look more carefully into the treatment, etc., and as a result report one hundred and sixty-six cases of cancer of the pregnant uterus which have occurred since the year 1886, the time of the Bar thesis.

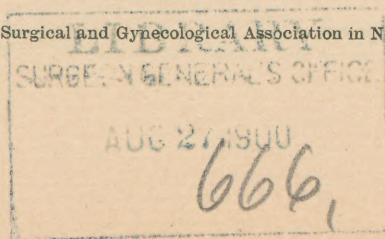
I shall confine this report mainly to the statistics of the treatment and results, referring you to Bar, Cohnstein, and others for information concerning the age, the period of recurrence, the period of abortions, etc.

There were twelve partial amputations of the cervix in the first seven months of pregnancy, averaging five and one-third months.

Ninety-one and six-tenths per cent. of the mothers recovered from the operations; 8.3 per cent. died; 66.6 per cent. went to full term, one child dying subsequently; and 41.6 per cent. aborted (one conception of six months living, Case No. 11).

Two of the mothers had subsequent operations for the removal of the cancer, but recurrence obtained in both cases. Another conceived a second time and died of peritonitis thirteen days after confinement.

* Read before the Southern Surgical and Gynecological Association in November, 1895.



Of the three cases of intravaginal amputation of the cervix, two recovered from the operations, giving a mortality of 33.3 per cent.; the children the same.

One mother died of peritonitis, one died suddenly six weeks after confinement, and the third had two subsequent operations for removal of the malignancy, making an ultimate mortality of 66.6 per cent.—possibly 100 per cent.

The intravaginal amputations give a combined mortality from operations, of mothers 19.3 per cent., of infants 40 per cent. The above fifteen cases were operated upon at an early stage of the disease (or at a time when the conditions were most favorable for any operative measure), with an ultimate maternal mortality of 60 per cent.; that of the babies 33.3 per cent. (See Table I.)

Sixteen supravaginal amputations were done prior to the seventh month, with a mortality of 6.2 per cent.; six had recurrence of the disease, three had no return, and seven were not observed; there was, therefore, an ultimate mortality of 66.6 per cent. in the nine cases in which the records are complete; thirteen cases were lost, mortality 82.5 per cent. Of the remaining three, one went to full term, 6 per cent., and the other two were not mentioned.

One case aborted thirty-five days after conception, aborted again in forty days; conceived a third time, was delivered normally, and was well five years afterward. These cases were also in the early stages of the disease when the portio vaginalis alone was involved, thus presenting a fair opportunity for testing the merits of the operation. (See Table II.)

There were three cases of supravaginal amputation of the cervix in puerperal state, but the data are not sufficiently complete to give very satisfactory information. Two were operated upon immediately after the confinement, one dying in seven days; the other was not recorded. The cervix in the remaining case was removed three weeks after the confinement and died two months later. The child in this case is the only one recorded as living. The mortality is 66.6 per cent. for both mothers and children. (See Table III.)

There were twenty-three vaginal hysterectomies. In two cases the results are not recorded, leaving twenty-one cases, all successful—mortality *nil*.

The statistics by Pfannenstiel * give a mortality of 8.3 per cent. in thirty-six cases since 1882. Of the ultimate results two had recurrence as follows: one in eighteen months, died; one in twenty-nine months, died.

Seven others were well when examined, as follows: two in one year; two in one and one-half years; one in two years; one in four years; one in four and one-third years.

The period of gestation at which the operations were done was as follows: one to two months, eight cases; two and one-half to three months, seven cases; three and one-half to four and one-half months, three cases. The hysterectomies were done before any very rapid extension or growth of the disease had taken place, hence the favorable results; mortality 23.4 per cent. at the end of one year. On throwing out the two cases that were well at the end of one year we have (of the recorded results) five recoveries and two deaths, or a mortality of 40 per cent. in eighteen months. Again throwing out the two cases that were well at eighteen months, we find a mortality at the end of the second year of 66.6 per cent. In this estimate all the living cases that have had no recurrences and have not gone two years since the operation are thrown out. Doubtless some of these have been permanently cured, and would reduce the percentage if accessible.

This is a very good showing for vaginal hysterectomy, which seems to be keeping pace with the advance of surgery; thus prior to 1882 the immediate mortality was, according to Gusserow,† Duncan,‡ and others, 23 to 28 per cent. Later, Fritsch§ reported 16 per cent.; next, Pfannenstiel|| estimated it at 8.3 per cent.; then Fabbri,** Modena, made it 4.1 per cent.; and, finally, the writer reports twenty-one cases without a death. (See Table IV.)

There were seven cases of vaginal hysterectomy in the puerperal period from fourteen to twenty days after abortion or delivery; all recovered. The cancers were in an incipient stage and the wombs small, so that in these respects the operations were under favorable

* Bar thesis.

† Gusserow, "Die Neubildungen des Uterus," Stuttgart, 1886.

‡ Obstetrical Transactions, 1885.

§ Bar thesis, Paris.

|| Ibid.

** *American Journal of Obstetrics and Diseases of Women*, No. 200, p. 288.

conditions. The chief objections to operating in the puerperal state are the increased vascularity of the tissues, the usually worn down condition of the patient, and the difficulty experienced in effectually sterilizing the vagina, constantly bathed in foul smelling, septic lochia, etc. (See Table V.)

So far there is one case of vaginal hysterectomy post-partum (done seventy-two hours after confinement). This one made a very fortunate recovery, though desperate and apparently unfavorable (case No. 63) by the writer. These eight cases without a death demonstrate that we need not fear to operate during the puerperal period when there is a reasonable hope for success. (See Table VI.)

The total number of abdominal hysterectomies is sixteen ; twelve of these were Freund's operation, one after Mackenrodt's method, and the remainder not described. Of eleven cases seven died from the operation, making the death-rate 43.7 per cent. One case had enchondroma of the pelvis ; another had return of the cancer in one year ; and a third had a return in a few months and died seven days after an operation for ileus due to cancer of the intestines. These three are the only ones with complete records, therefore it is impossible to give an estimate of the ultimate recoveries. The products of conception were all lost. (See Table VII.)

Cæsarean section was done forty-three times, as follows: conservative (or Säger), twenty-six ; Porro, nine ; Freund's, eight times. Of the twenty-six conservative operations seventeen died, seven recovered ; in two the results are not recorded, and one was dead before the operation was performed. Mortality in twenty-three cases, 43.7 per cent. The high death-rate is evidently due to the fact that these cases are usually exhausted from prolonged labor, sepsis, etc., which unfits them for operations of this magnitude, for in the cases that do recover the wound heals kindly. In addition to the causes just mentioned, the chances for complications to arise subsequent to the operations are very much increased ; thus the liability to secondary hemorrhage and sepsis is much greater than in the non-malignant. This is illustrated by the fact that of the sixteen deaths, three died of peritonitis, two from hemorrhage subsequent to the operations, one from anemia, and two from exhaustion. Excluding the three cases of peritonitis as a factor in the

death-rate of all the abdominal operations, 25 per cent. of the deaths were caused by complications not common to the non-malignant subject, and doubtless it would appear greater if the immediate cause was known in all the cases. All cases dying at the end of three weeks and under are recorded in the list of the dead. One that died at the end of two months is recorded as recovered, having safely passed the effects of the operation. Of the twenty-six cases, twenty-three babies were born alive, three dead, and two died respectively two weeks and two months afterward—mortality 11.5 per cent. (See Table VIII.)

The number of recoveries in the Cæsarean-Porro operations were four; deaths, five, or mortality of 55.5 per cent. One of the recoveries went insane, after fourteen days, from chronic alcoholism. These cases were more favorable than those upon which the conservative operation was done, five of the nine having the cervix only involved.

Of the conceptions seven were saved (twins in one instance), three lost, and one not stated, giving a mortality of 30 per cent. (See Table IX.)

In eight Cæsarean sections by the Freund method there were three recoveries and five deaths, giving a mortality of 62.5 per cent. Out of this number five babies were saved, mortality 42.8 per cent.; six of these cases were complicated, four by extensive exudates in the pelvis, one dying the next day with peritonitis (pre-existing?), with a temperature of 39.5 C., another had been in labor seven days, while still another was very weak and anemic.

This is an unfair test for Freund's operation, some of them being unfit for any attempt at radical operation, especially the four with extensive exudates in the vaginal walls. If these were thrown out (with three deaths and one recovery) the mortality would be slightly reduced. Thirty-four children were born alive, eight died, and two were not recorded, making a total of forty-four, there being twins in one case. This gives an aggregate mortality of 22 per cent.

Of the forty-three cases of Cæsarean section many were done regardless of the kind of operation best suited to them; for instance,

there were seven cases of the conservative operation when the portio vaginalis or cervix uteri alone was involved. Total hysterectomy might have been done with hope of ultimate recovery in some of them.

Again, Freund's operation was done in four cases where the exudate or disease had extended to the surrounding parts, which increased the death-rate of the operations done by this method. They were better suited to the Porro or to the conservative operations. In five of the Porro it is possible that total hysterectomy might have been effected, as the parauterine tissues were not involved. This perhaps is not an unjust criticism, for the operations were all done in recent years and at a time surgery was making rapid strides toward perfection; especially is this applicable to those done in the last few years, as they should have profited by previous results. While total extirpation following Cæsarean section may not give as small a mortality in the immediate results as the conservative operation, I feel assured that in *properly selected* cases it is the ideal operation where the fetus can be born *per vias naturales*. It offers some hope to the mother.

According to these figures the conservative Cæsarean operation is unquestionably the safest of the three, so far as it concerns the mother. It ought, therefore, to be employed in all cases with obstruction to the birth of the child by extensive exudates or where there is not a reasonable hope of eradicating the malignancy.

Porro's operation is supposed to diminish sepsis in the cavity of the uterus, but that is counterbalanced by a suppurating stump in the abdominal wound.

If, therefore, it is a question of election between the two latter operations, the feebleness or weakened physical forces of the patient ought to decide in favor of the conservative Cæsarean operation.

It might be said, however, that there are not a sufficient number of Porro operations in these statistics to give a fair estimate of its value. I must confess that I was prejudiced against the conservative operation as done in the past, regarding it in some instances a reckless abandonment of the mother for the sake of an often undeveloped, ill-nourished offspring that may soon die or inherit

the malignancy. But such is not the case when the mother's condition is hopeless; the child's interest must then be subserved. (See Table X.)

There were three forceps deliveries with previous operations, two by incisions and one curetting. Severe bleeding occurred in the two cases of incisions, one mother dying in twelve hours, and in the other case the child was lost. The remaining case was successful, also an additional one without a previous operation. Estimated results in such a small collection are very uncertain, but, as far as they go, they bear out the claim that the use of the forceps is attended with some danger, chiefly from rupture of the diseased cervix and as a carrier of infection. They also support the claim of Baudelocque* that 75 per cent. of mothers and 50 per cent. of children recover. (See Table XI.)

I have encountered but one instance of amputation of the anterior lip during labor, resulting in the recovery of the mother and death of the child.

At five different times tumors were removed intra-partum by scissors, curette, forceps, thermocautery, etc., with four immediate recoveries of both mother and child. The case that died was a tumor of the cervix and vagina, which was partially removed; mortality 20 per cent. (See Table XII.)

Incision of the cervix is a subject that is likely to present itself for consideration in a great many cases at or near the end of gestation. It is therefore one of considerable importance to the child and also to the mother, as it may be the means of evacuating the uterus preparatory to a subsequent extirpation. Seven cases with five immediate recoveries (mortality 28.5 per cent.) are shown in this list. Hemorrhage is the great danger to be feared; the two deaths in the list are chargeable to it, dying respectively in two and twelve hours. Another case was forcibly dilated by the hand, and the uterus ruptured through into the bladder and peritoneal cavity. She lived for three and one-half months, and is therefore on the list of immediate recoveries. Two others died respectively in five weeks and in two years. The final results were death in all the cases fully recorded. Several had protracted confinements, as fol-

* Taken from Charpentier's "Cyclopedia of Obstetrics and Gynecology," vol. iii., p. 168.

lows: one was in labor thirty-six hours; one in labor one and one-half days; one in labor six days; one in labor eight days. To this is ascribed in a very large measure the death of three babies. The infantile mortality was 35 per cent. After incisions the babies were delivered as follows: four by turning, with one death; one by extraction, with one death; one by forceps, with one death; two spontaneously, with one death. Of the seven cases, four were dead within three and one-half months after labor. It appears that after the cutting the hemorrhage is so great that there is a demand for immediate delivery or plugging of the womb with the extremities of the child for the purpose of controlling it. (See Table XIII.)

Five induced abortions have been encountered, with a mortality of 20 per cent., the death in this case being due to puerperal fever. One case had a carcinoma the size of a hazelnut, successfully removed on the seventh day of childbed. The woman conceived again, and was delivered three years later at full term. One uterus had a deep rupture of the cervix, to which the curette and cautery were applied, resulting in normal childbed. The ultimate results are unknown, except in the one case which was cured by removal of the tumor and was well at the end of three years. As abortion destroys the child and does not materially benefit the mother, it becomes a question of doubtful utility, especially in cases that are amenable to other methods of treatment. (See Table XIV.)

Lewis,* of New Orleans, states that about 40 per cent. of all cases abort spontaneously.

Gusserow on Cohnstein says it is about 35 per cent., only 32 per cent. of the children being born alive, and hardly 20 per cent. lived until their mothers left the bed. "Here we have 20 per cent. of living children, and one-half of them without mothers."

The expectant plan of treatment presents a very good showing—that is, twenty-one cases with nineteen recoveries, two deaths, making a mortality of 10.5 per cent., including five cases under seven months of gestation, or 14.2 per cent. by excluding the five latter cases. Of the twenty-one cases the disease was confined to the cervix or a portion of the same, only two of which were extensive, leaving fifteen cases limited in extent; three of the re-

*Charpentier's "Cyclopedia of Obstetrics and Gynecology," vol. iii., p. 166.

maining had invaded the neighboring tissues, and one was not stated. Thus the comparatively low mortality is explained, for a like number of advanced cases would have shown a much more woful set of figures.

Charpentier* states that in forty-seven cases twelve died of rupture of the uterus and three of laceration of the cervix, or 31.9 per cent. Chantreuil places the maternal mortality at 36.7 per cent., and the writer at 24.3 per cent, the average of which is 30.4 per cent, childbed mortality.

After confinement 35 per cent died within three months of cancer, 28.5 per cent. of others had recurrences, while the remainder were not observed; thus 64.4 per cent. were either dead or in a helpless condition soon after childbed.

Of the sixteen recoveries among the cases advanced to seven months of gestation, nine succumbed to the disease, one died of an operation, and six are not reported; thus no final cures are to be found in the list of those treated by the expectant plan. (See Table XV.)

The very good showing has changed into a very poor one.

Chantreuil places the infantile mortality at 60 per cent., Cohnstein at 57 per cent., Hermann at 40 per cent., the writer at 50 per cent., making an aggregate mortality of 51.8 per cent.

Cohnstein (Bar thesis) states that 68 per cent. go to full term, and Hermann puts it at 28.3 per cent., which gives an average of 48.1 per cent. Then if only 48.1 per cent. of pregnancies go on to full term and 51.8 per cent. of these die, the estimate of successful issue is 24.8 per cent. of all the pregnancies in the cancerous uterus.

The best way to arrive at a conclusion as to the most satisfactory method of conducting a case of this sort is first to exclude all the operative measures that have resulted in high death-rate and accomplish but little good. Artificial abortion secures to the mother very little reduction in the childbed mortality, and defers death only for a limited time. When it is done with a view to subsequent extirpation the advantages gained in the reduction of the size of the womb are counterbalanced by loss of valuable time and

* Charpentier's "Encyclopedia of Obstetrics and Gynecology," vol. iii., p. 167.

puerperal fever; and as the uterus can be extirpated as safely during pregnancy as at other times, artificial abortion is worse than useless. So also should amputations and partial amputations of the cervix be discarded if any hope for the mother remains. It is true that a few cases have been cured by this means, but the number is so small that it will not pay for the chance it has thrown away for saving the mother's life. In like manner all "dilly-dally" methods, such as curetting and cutting off the exuberant growths, should be eschewed as dangerous despoilers of time and opportunity. The next consideration is whether we should act in the interest of the mother or the child, or both. In the incipency of the disease, when the mother's chances are good, give her the benefit of it. Late in the disease, when the mother's case is hopeless, look to the interest of the child. Between these will be found cases of doubt in which there will be room for the exercise of judgment. Careful perusal of the statistics will show that vaginal hysterectomy is the most satisfactory means of securing permanent relief in the early period of gestation. Next to it is abdominal hysterectomy in suitable cases. The former gives an immediate mortality of 4 per cent. and an ultimate recovery of 33.3 per cent. at the end of two years, but the conceptions are all destroyed. So we have here a comparison, upon the one hand, of 33.3 per cent. of ultimate recoveries of the mothers under vaginal hysterectomy, and, upon the other hand, 20 per cent. of ultimate recoveries of the children under the expectant treatment, which proves the former decidedly preferable.

At the close of gestation, when the mother's case is hopeless, she should be delivered by such means as will best serve the child's interest, though her immediate safety and comfort should not be disregarded. In instances of partial obstruction of the cervix incision may answer; when the obstruction is complete, Cæsarean section is indicated. Of the three methods, the conservative gives the best results, the infantile mortality being 11.5 per cent., against 50 per cent. of the expectant treatment. Or, out of sixty mixed operations forty-four children were born alive (70.3 per cent.), showing that any of the operative measures for delivering the fetus is superior to the expectant treatment.

In the doubtful cases the fetus may be near the period of viability

and the mother's chance hopeful. In that case gestation might be continued until the child is viable, when the uterus should be evacuated and afterwards removed. This opinion is sustained by the success attained in operations done in the puerperal state, all the hysterectomies recovering.

Thus, a short summary shows that vaginal hysterectomy should be safe in the early months of pregnancy and the puerperal state, when there is a reasonable hope for the mother.

The abdominal hysterectomy should be done under the above conditions when the uterus is too large to be rapidly and safely removed through the vagina.

That at or near the end of pregnancy Cæsarean section (conservative) should be resorted to when the child's interest is to be considered.

That Cæsarean section with Freund's operation is permissible when the disease is confined to the uterus and the child viable.

That in doubtful cases cutting of the cervix and rapid delivery may be judicious when the incision can be made in unulcerated or non-infiltrated tissue.

That as there are four chances to one against the life of the fetus, and as an equal or greater number of mothers may be ultimately cured in the early stages of the disease, the safety of the fetus should not be allowed to hazard the life of the mother.

And that, upon the other hand, the futile efforts directed to the interest of the mother when her case is hopeless should not jeopardize the safety of the fetus in the latter months of pregnancy.

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OPERATIONS UPON THE CERVIX UTERI.

TABLE I.—INTRAVAGINAL—PARTIAL AMPUTATION OR REMOVAL.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, fetus.	Recurrence.	Time of gestation.	Diagnosis.	Remarks.
1	Schanta.	Zeitschrift für Heilkund Frag., 1887.	Anterior lip.	Amputat'n ant. lip.	Recov- ered.	Full term.	In poste- rior lip.	6 mos.	Carcinoma	Cancer returned sixteen days after confinement; vaginal hysterectomy five months after recovery.
2	Biletet, A.	Centralblatt für Gynä- kologie, 1884, No. 8, 44.	Polypus in cerv. canal; collum in- filtrated.	Curette and cautery.	"	Full term. died subse- quently.	Returned; health rela- tively good nine mos. afterward. on posteri- or lip.	4 5 mos.	.....	Degeneration followed curette and cautery, and extended to the vagina.
3	Kaltenbach.	Geburtschifffahrt's Lehr- buch, 1883.	Anterior lip.	Excision ant. lip.	"	Full term.	In 4 years on posteri- or lip.	5 mos.	Carcinoma	Posterior lip removed, with re- covery.
4	Schriebe.	Inaugural Dissertation, Halle-Wittenberg, 1883.	Portio vag- inalis.	Excision of cancer.	"	Full term.	In 4 years.	.....	.....	First excision in 1883, while preg- nant; recurred. Cancer re- turned in 1892; again removed by excision; recurred. Non- normal delivery at full term.
5	Savory.	Obstetrical Transactions xvii., 2.	Cervix.	Scraping.	"	Pregnancy undisturb'd	Recurred.	.....	Carcinoma	Conceived again; spontaneous delivery at seventh month; died thirteen days after.
6	Godson.	Zeitschrift für Geburt- shilfe und Gynäkol- gie, 1875, vol. i., No. 2.	Cervix.	Scraping.	"	Lived.	.....	7 mos.	Carcinoma (cauli- flower)	Mother died thirteen days after of peritonitis; carcinoma of lymphatic glands.
7	Felsenreich.	Wiener Medicinische Presse, 1883, 34.	Posterior lip.	Amputat'n post. lip.	Died.	Lived.	.....	4 mos.	Carcinoma	
8	Uelbig.	Greifswald, 1889.	Posterior lip.	Amputat'n post. lip.	Recov- ered.	Abortion.	.....	5 mos.	Carcinoma size pig- eon's egg.	
9	Itabig.	Greifswald, 1889.	Anterior lip.	Amputat'n ant. lip.	"	Abortion.	.....	.....	Carcinoma size apple.	Fetus size of finger.
10	Olbrieh.	Greifswald, 1887.	Anterior lip.	Amputat'n ant. lip.	"	Dead.	.....	.....	Carcinoma size apple.	

11	Schroeder.	Taken from Ann.de Gyn. et d'Obstet., Paris, 1891, xli., p. 187 (C. H. Stratz).	Anterior lip.	Amputat'n ant. lip.	Recov. ered.	Abortion 3 wks. after living conception	..... 16 mos.	Anterior lip amputated above vagina.
12	Stralz.	Zeitschrift für Geburtshilfe und Gynäkologie, vol. xli., No. 1.	Anterior lip and cervix.	Amputat'n ant. lip (supra-vaginal).	"	Abortion in 3 weeks.	.....	.....
11 operators		.....	.....	12 cases.	11 R. 1 D.	4 abortions 1 dead, 7 lived.	..... 5 returned, 7 unknown.	8 carcinoma, 4 unknown.

INTRAVAGINAL AMPUTATIONS OF PORTIO VAGINALIS.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recurrence.	Time of gestation.	Diagnosis.	Remarks.
13	Bar.	Thèses de Paris, 1886.	Cervix.	Amputat'n (galvano-caustic) of portio.	Died.	Died.	.....	7 mos.	.....	Death of mother caused by peritonitis.
14	Schroeder.	Lehrbuch, 5th edition.	Cervix.	Amputat'n of portio.	Recov. from operat'n	Full term.	Died in six weeks.	5 mos.	Carcinoma	Mother died suddenly after six weeks.
15	Vanden.	Inaugural Dissert., Bonn, 1880.	Posterior lip.	Amputat'n of portio.	Recov. ered.	Full term.	Returned.	4 mos.	.....	Subsequently two operations to remove remaining portions of cancer. Forceps delivery.
3 operators		.....	.....	3 cases.	2 R. 1 D.	2 full term, 1 died.	2 returned, 1 died.	.....	1 carcinoma, 2 unknown.	

TABLE II.—SUPRAVAGINAL AMPUTATIONS, SEVEN MONTHS AND UNDER.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recur-rence.	Time of gesta-tion.	Diagnosis.	Remarks.
16	Schroeder.	Taken from Ann. de Gyn. et d'Obst., Paris, 1894, xii., p. 187 (C.H. Stratz).	Os uteri.	Supravaginal amputation.	Recover- ed.	Lithope- dion.	No recur-rence.	.....	Carcinoma	
17	Schroeder.	Ibid.	Os uteri.	"	"	Abortion in 4 days.	No recur-rence.	4 mos.	"	
18	Stratz.	Zeitschrift f. Geburt- shilfe und Gynäkolo- gie, vol. xii., No. 1.	Portio vag- inalis.	"	"	.....	.....	.....	"
19	Stratz.	Ibid.	Portio vag- inalis.	"	"	Abortion 4th day.	.....	4 mos.	"	
20	Drude.	Erlanger, 1889. (This is duplicate Case 11 of Wendrim's 61 cases.)	Portio vag- inalis size of fist.	"	"	Abortion in 17 days.	.....	4 mos.	"	
21	Hofmeier.	Zeitschrift f. Geburt- shilfe und Gynäkolo- gie, 1886, vol. xiii.	Ant. and post. lips, size of a dollar.	"	"	Abortion.	Recurr'nce in 7 months	7 mos.	"	
22	Hofmeier.	Ibid.	Portio vag- inalis.	"	"	Abortion.	Early re- currence.	.....	"
23	Hofmeier.	Ibid.	Portio vag- inalis.	"	"	Abortion.	Recurr'nce in 13 mos	.....	"
24	Hofmeier.	Ibid.	Portio vag- inalis.	"	"	Abortion.	12 months recurrence in pelvic connective tissue.	5 mos.	"	
25	Hofmeier.	Ibid.	Portio vag- inalis.	"	Died from opera- tion.	.....	.....	.....	"
26	Schroeder.	Zeitschrift f. Geburt- shilfe und Gynäkolo- gie, 1889, vol. xvi., and 1891.	Portio vag- inalis.	"	Re-ov- ered.	Aborted after 35 days.	No recur-rence.	2 mos.	"	Aborted again in forty days. Conceived again; normal de- livery. Alive and well five years after.
27	Drude.	Erlanger, 1889.	Right side, both lips.	"	"	Abortion.	Well one year after.	2 mos.	"	Retained placenta, which was removed next day. Peritonitis; slow recovery.

28	Drude.	Ibid.	Tumor of lips size of goose egg.	"	"	Abortion.	.....	.....	.....	.....
29	Seegelken.	Jena, 1892.	Cervix.	"	"	Abortion.	Well one year after.	4 mos.	Carcinoma	
30	Lee (N. Y.)	Amer. Journ. Obstetrics, No. 124, p. 400.	Cervix.	"	"	Abortion.	.....	4 mos.	"	
31	Mundé.	By letter.	Cervix.	Supravaginal amput. by galvano-cautery.	"	Full term.	.....	3 mos.	.....	Pregnancy unsuspected.
9	operators.	.....	.....	16 cases.	15 R. 1 D.	12 aborted. 1 full term. 1 lithoped. 2 unknown.	3 no return. 2 well 1 yr. 4 recurrence 7 unknown.	.....	14 carcino. 2 unknown.	

TABLE III.—SUPRAVAGINAL AMPUTATION OF THE CERVIX IN THE PUERPERAL STATE.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recurrence.	Time of gestation.	Diagnosis.	Remarks.
32	Schroeder.	In C.H. Stratz/Zeitschrift f. Geburtshilfe u. Gyn., xii., p. 28; taken from Ann. de Gyn. et d'Obst. Paris, 1894, xli., p. 187.	Cervix.	Supravaginal amputation of cervix after confinement.	Died 7 days later.	Unknown.	.....	.....	Carcinoma	
33	Schroeder.	Ibid.	Cervix.	Supravaginal amputation of cervix 3 weeks after confinement.	Died 2 mos. after operation.	Living.	.....	.....	"
34	Felsenreich.	Centralblatt für Gynäkologie, 1884, No. 33.	Cervix.	Supravaginal amputation of cervix immediately after confinement.	Not stated.	Not stated.	.....	.....	"	Curetting and turning.
2	operators.	.....	.....	3 cases.	2 D. 1 unknown.	1 died. 1 lived. 1 unknown.	.....	.....	3 carcino.	

VAGINAL HYSTERECTOMY.

TABLE IV.—PREGNANT UTERUS.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Reurrence.	Period of gestation.	Diagnosis.	Remarks.
35	Kottbus.	Berliner klinische Wochenschrift, 1887, No. 22.	.....	Vag. hysterectomy.	.. ....	Destroyed.	Well after 2 years.	23 mos.	None.	
36	Hofmeier.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1892, vol. xxiii., Krukenberg.	Ant. lip (incipient).	"	Recovered.	"	Well 4 yrs. and 4 mos. after.	3 mos.	Carcinoma	
37	Münchmeyer.	Archives f. Gynäkologie, 1889, vol. xxxvi., No. 3.	Ant. lip.	"	.....	"	Well 4 yrs. after.	1 mo.	"	Cancer large and discharging pus before operation. Uterus partially fixed.
38	Gusserow.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1888, vol. xiv.	Portio vag. (incipient).	"	Recovered.	"	.....	1-2 mos.	"	Pregnancy unsuspected.
39	Krukenberg	Ibid., 1892, vol. xxii.	Cervix.	"	"	.....	Well 18 mos.	.....	"
40	Krüg.	Ibid. (Krukenberg).	Cervix.	"	"	.....	Well 1 year.	.....	"
41	Taylor.	Med. Record, Feb. 28, '91.	Cervix.	"	"	.....	Died in 18 mos.	2 mos.	"	
42	Schrebe.	Inaugural Dissertation, Halle-Wittenberg, 1893.	Portio vag.	"	"	.....	recurrence.	3 mos.	"	
43	Mursinna.	Ibid., Würzburg, 1891.	Portio vag.	"	"	.....	.....	3 mos.	"	
44	Billroth.	.....	Cervix and vagina.	"	"	.....	.....	.....	"	Vesico-vaginal fistula.
45	Taylor.	Med. Record, Feb. 18, '91.	Portio vag.	"	"	.....	.....	2 mos.	"	
46	Hofmeier.	Deutsche medicinische Wochenschrift, 1887.	.....	"	"	.....	.....	3 mos.	None.	
47	Thiem.	Frauenarzt, July, 1886.	Portio vag.	"	"	.....	Died in 2½ years.	3 mos.	Carcinoma	
48	Greig Smith	Bristol Lancet, 1887.	Portio vag.	"	"	.....	.....	2 mos.	Carcinoma (cauliflower)	
49	Bresmecke.	Mohr's Inaugural Dissert. Halle, 1889.	Ant. wall of cervix.	"	"	.....	.....	2 mos.	Carcinoma	
50	Bresmecke.	Ibid.	Post. wall of cervix and roof vagina	"	"	.....	.....	3 mos.	Carcinoma	
51	Kallenbach.	Ibid.	Portio vag.	"	"	.....	.....	4 mos.	"	
52	Mochenrath	Archiv. f. Gynäkologie, vol. lxi., p. 508.	.....	"	.....	.....	.....	.....	None.	

53	Vander Veer	Journ. Am. Med. Assoc., 1892, xix, pp. 14-17.	Ant. lip.	Vag. hysterectomy.	Recovered.	.....	.....	12½ mos	Carcinoma (epithelioma).
54	Spencer Wells.	Med. Chir. Trans. Lond., lxx, p. 25; also in Ann. de Gyn. et d'Obst., Paris, 1894, xlii, 1898.	Portio vag.	"	"	.....	.....	4½ mos	Epithelioma.
55	Hernandez, E.	Ann. de Gyn. et d'Obst., Paris, 1894, li, pp. 81, 97-157-203.	Post. lip.	"	"	.....	Good he'llth 1 year later	2 mos.	Carcinoma
56	Kinke.	Amer. Journ. Obstetrics, No. 138, p. 828.	Portio vag.	"	"	.....	.....	.....	Pregnancy unsuspected.
57	Noble, G. H.	Records Grady Hospital, Atlanta, Ga.	Portio vag.	"	"	.....	Well 17 mos afterward.	3½ mos	Carcinoma
20 operators	.....	.....	.....	23 cases.	21 rec. 2 unk'n	Destroyed.	.....	.....	18 carc. noma, 1 epithel. 4 unknown.

TABLE V.—VAGINAL HYSTERECTOMY AFTER ARTIFICIAL ABORTION OR IN PUERPERAL PERIOD.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Reurrence.	Period of gestation.	Diagnosis.	Remarks.
58	Olshausen.	Klinische Beiträge zur Gynäkologie, 1884, p. 101.	Portio vag.	Vag. hyst. 14 dysafter artificial abortion.	Recovered.	Dead.	.....	.....	None.	
59	Berethod.	Centralbl. f. Gynäkologie, 1887, No. 29.	Portio vag.	Vag. hyst. 20 dysafter artificial abortion.	"	"	.....	6 mos.	Carcinoma	Turning.
60	Loehlen.	Ibid., 1891, No. 10.	Portio vag.	Vag. hyst. 16 dysafter artificial abortion.	"	.....	.....	.....	"
61	Loehlen.	Deutsche med. Wochen.	Cervix.	16 dysafter artificial abortion.	"	.....	.....	.....	"
62	Krukenberg.	Zeitschrift f. Geburtshilfe und Gynäkologie, 1892, vol. xxii.	Post. lip.	Vag. hyst. 18th day. 17 dysafter abortion.	"	.....	.....	.....	"

TABLE V.—Continued.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
63	Flore.	Centralbl.f.Gynäkologie, 1891, 32 (duplicate Case 12, Wendriner's 61 cas's)	Cervix (incipient).	Vag. hyst. peral puer'd	Recovered.	Dead.	.....	.....	Carcinoma	Perforated child on account of exhaustion.
64	Theilhaber.	Archiv. f. Gynäkologie, 1894, vol. lxvii, p. 56.	Portio vag.	Vag. hyst. 20 dys after delivery.	"	"	.....	.....	"	Labor established by injection of water to which lysol had been added. Os uteri contracted around child's neck, causing its death.
6 operators.			.....	7 cases.	7 rec.	4 dead. 3 unknown.	.....	.....	5 carcino. 2 unknown.	

TABLE VI.—VAGINAL HYSTERECTOMY, POST-PARTUM.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
65	Noble, G. H.	Trans. Southern Surg. Assoc., 1894.	Portio vag. nearly destroyed by ulceration	Vag. hyst. 72 hours after confinement.	Recovered.	Lived.	Recur. in 6 months.	.....	Carcinoma	

ABDOMINAL HYSTERECTOMY.

TABLE VII.—OF PREGNANCY.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
66	Spencer Wells.	Centralblatt f. Gynäk., 1892, No. 17.	Cervix.	Freund's.	Lived.	Dead.	In one year	6 mos.	Epithelio'ia	Enchondroma of pelvis; vaginal separation of cervix.
67	Cittadini.	Centralblatt f. Gynäk., 1889, No. 12.	Body and cervix.	"	"	"	"	3 mos.	Carcinoma	
68	Zweifel.	Lehrbuch d. Geburtshilfe	Portio vag.	"	"	"	"	6 mos.	"	
69	Zweifel.	Ibid.	"	"	Died.	"	"	"	"	
70	Zweifel.	"	"	"	"	"	"	"	"	
71	Stocker.	Centralblatt f. Gynäk., 1892, No. 32.	"	"	Recov. ered.	"	"	6 mos.	"	
72	Mackenrodt	Archiv. f. Gynäkologie, Vol. xlv., p. 568.	"	"	Died.	"	"	"	"	
73	Mackenrodt	Ibid.	"	"	"	"	"	"	"	
74	Mackenrodt	Deut. med. Wochenschrift, 1893, p. 1185.	"	"	Recov. ered.	"	"	"	"	
75	Fitsch.	Ann. de Gyn. et d'Obst., Paris, 1894, xlii.	Ant. lip.	Freund's, after trans- fusion of salines.	Coll'pse	"	"	7 mos.	Carcinoma	
76	Hernandez.	"	Cervix.	"	"	"	"	6 mos.	"	
77	Hernandez.	Ibid.	Cervix.	Freund's, after curet- ting and cauteriz'th	Recov. ered.	"	"	5 mos.	"	No. 78. Cancer extensive; re- turned in several months with cancer in intestines. Diagno- sis: <i>Illeus</i> . Operation: Re- moval of diseased part of in- testine and made artificial anus. Died 7 days later.
78	Hernandez.	Ibid.	Cervix.	Macken- rodt's meth- od.	Recov. ered.	"	"	6 mos.	"	
79	Martin.	Verhandlungen des Fifth Congresses f. Gyn., p. 281.	Cervix.	COMPLICATED BY EXTRAUTERINE PREGNANCY. Abdominal hysterect- omy.	Recov. ered.	Dead.	"	"	Carcinoma	
80	Munt.	Zeitschrift f. Geburt- shilfe und Gynäk., Vol. xxvi.	Portio vag.	"	"	"	"	"	"	
9 operators.			16 cases.		9 R. 7 D.				6 carcino. 1 epithel. 9 unknown.	

Also one other case in which the operation is not mentioned (see Decorzant, Bulletin Société Anatomique, 1884, p. 260). Mother died.

CÆSAREAN SECTION, CONSERVATIVE, AND COMBINED WITH OTHER OPERATIONS.

TABLE VIII.—CONSERVATIVE, OR AFTER SÄNGER.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
81	Schroeder.	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	Cervix.	Cæsarean section, conservative.	Died 2 days after oper.	Lived 2 months.	.....	6 mos.	.....
82	Schroeder.	Centralbl. f. Gyn., 1888, p. 10.	"	"	.....	Dead.	.....	.....	.....
83	Grapow.	Zeitschr. f. Geburtsh. u. Gyn., 1889, l. u. 110.	.....	"	Death from anemia.	Lived.	.....	.....	Malignant tumor.	
84	Morris.	Brit. Med. Journ., 1883, vol. i.	Cervix and post. roof of vagina.	"	Recovered.	"	.....	6 mos.	Carcinoma.	
85	Ehlers.	Braunswig. Archiv. f. Gyn., 1887, vol. xxx.	Cervix, uterus and vagina.	"	"	"	.....	.....	"	Operation done 18 hours after labor began; convalescence normal.
86	Bar.	Archiv. f. Gyn., 1887, vol. xxx.	.....	"	Died 3 hrs. after; not from oper.	"	.....	.....	Osteo-carcinoma of pelvis.	
87	Berthod.	Centralblatt f. Gyn., 1887, No. 29.	Cervix and vagina.	"	Died of sepsis.	Dead.	.....	.....	Carcinoma.	
88	Lusk (N. Y.)	Archiv. f. Gyn., 1888, vol. xxiii.	Cervicis vesicæ.	one hour after death Cæsarean section.	Died after 2 months.	Lived.	.....	.....	"	Connective tissue infiltrated; condition unfavorable.
89	Merkel.	Centralblatt f. Gyn., 1889, No. 44.	Cervix and roof of vagina.	"	Died 6 days sup. peritonitis.	"	.....	.....	"	Parasitic connective tissue infiltrated.
90	Solzmann.	Königsberg, 1890.	Cervix, tuberculous tumor.	"	Died 2 days peritonitis.	Died.	.....	.....	"	Condition unfavorable.
91	Teufel.	Archiv. f. Gyn., 1889, vol. xxvi., No. 2.	Uterus and vagina.	"	Died in 21 days.	Lived.	.....	.....	"	Connective tissue infiltrated.
92	Teufel.	Archiv. f. Gyn., vol. xxxvi., No. 2.	Carcinoma (extended).	mos. before removal 7 mos. before Cæsarean.	Died 3 mos. of hæmorrhage.	Died in 2 weeks.	.....	.....	"
93	Parak.	Revue Obstétrique, Ap ^l , 1891.	Cervix.	"	Lived.	Lived.	.....	.....	"

94	Jannel.	L'Âbelle Médicale, Apr'l 1891.	Cervix and vagina.	Cesarean, Sänger.	Died 18 dys exhaustion	Lived.	.....	.....	Carcinoma
95	Lusk.	Frommel's Jahresbericht, 1887, p. 221.	Cervix, bladd'r and parametric con. tissue.	" "	Died in 2 months.	"	.....	.....	"
96	Bagdonick.	Centralblatt f. Gyn., 1891, No. 6.	Cervix and vagina.	" "	Died 15 dys	"	.....	.....	"
97	Guenlot.	Frommel's Jahresbericht, 1892, p. 358.	Portio vaginalis.	" "	?	"	.....	.....	"
98	.....	Revaista Médica de Mexico.	Uterus and vagina.	" "	Died.	"	.....	.....	"
	Munk.	Prager medicin. Wochen. 1896, No. 43.	Cervix.	" "	Recovered.	"	.....	.....	"
100	Mendes de Leon.	Nederl. Tijdschrift von Genesck, 1888, No. 2.	" "	" "	Died 6 days	"	.....	.....	"
101	Merkel.	Munchen. med. Wochen., 1889.	Cervix and vagina.	" "	Died 8 days	"	.....	.....	"
102	Klingelhöfer.	Inaug. Dissert., Marburg, 1888.	" "	" "	Died 2 dys, hemorrhage.	"	.....	.....	"
103	Solzman.	Inaug. Dissert., Königsberg, 1890.	" "	" "	Died 24 dy, peritonitis.	"	.....	.....	"
104	Goodell.	Frommel's Jahresbericht, 1889, p. 296.	" "	" "	Lived.	"	.....	.....	"
105	Pawleck.	Frommel's Jahresbericht, 1889, p. 300.	" "	" "	Lived.	"	.....	.....	"
106	Meyer.	Chauté Annalen, vol. xiv.	" "	" "	Died 24 hrs, exhaustion	"	.....	.....	"
21	operators	.....	6 limited to cervix. 18 involving neighboring structures 2 not mentioned.	26 cases.	17 died. 7 recov. 1 died before oper. 1 not mentioned.	25 children. 23 living. 2 dead.			

Operation after 16 hours of labor pains.

TABLE IX.—CÆSAREAN SECTION ACCORDING TO PORRO.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, fetus.	Recur- rence.	Period of ges- tation.	Diagnosis.	Remarks.
107	Leopold.	Archiv. f. Gyn., 1890, vol. xxxvii, No. 2.	Vagina.	Cæsarean, Porro.	Recovered.	Lived.	.....	... ..	Carcinoma	Left section of the pelvis infiltrated.
108	.....	Ibid.	Cervix.	"	Normal for 14 days.	Unknown.	... ..	.....	"	Insane after 14 days from chronic alcoholism.
109	Krassows- kie.	Petersburg. Gyn., 1889, vol. xxxii.	"	"	Died.	Lived.	... ..	.....	"
110	Beaucamp.	Petersburg. Gyn., 1889, vol. xxxvi, No. 2.	"	"	Died 4 mos. afterwards.	Twins: 1 lived, 1 died.	Metas- tasis, 4 mos.	... ..	"
111	Clauss.	Tubingen, 1890.	"	with inver- sion of stump to vagina after Frank	Died in 4 days.	Lived.	... ..	.....	"	Extended infiltration, tympania uteri.
112	.....	Archiv. f. Gyn., 1889, vol. xxxvi, No. 2.	Cervix and roof of vagina.	Cæsarean, Porro.	Recovered.	Dead.	... ..	.....	"	Inguinal glands infiltrated.
113	Sutergin.	Deutsche med. Wochen., 1891, No. 19.	Cervix.	"	Died in 6 weeks.	Lived.	... ..	.....	"
114	Sutergin.	Moscow, ibid.	Cervix and roof of vagina.	"	Died in 7 days, sup. peritonitis.	Lived.	... ..	.....	"
115	Murphy.	Frommel's Jahresbericht, 1889, p. 313.	Cervix.	"	Died in 3 days.	Dead.	... ..	.....	"
9 operators.		.....	.....	9 cases.	5 recov'd. 4 died.	6 recov'd. 3 died. 1 unknown.				

TABLE X.—CESAREAN SECTION ACCORDING TO FREUND.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recur-rence.	Period of ges-tation.	Diagnosis.	Remarks.
116	Bischoff.	Zeitschrift. f. Geburtshilfe und Gyn., 1884, vol. x. Göner.	Cervix.	Cesarean, Freund.	Died in 9 hours.	Lived.	.....	.....	Carcinoma	Patient very weak and anemic; operation difficult on account of extended infiltration.
117	Schroeder.	Ibid, 1886, vol. xii. Stratz	"	"	Died in 1 day, peritonitis.	Dead.	.....	.....	"	Temp. 39.5° C.
118	Fritsch.	Centralblatt f. Gyn., 1892, vol. xvi. Möller.	Portio vag. and post. vag. wall.	"	Recovered in 2 mos.	Lived.	.....	.....	"
119	Göner.	Zeitschr. f. Geburtshilfe und Gyn., vol. x. No. 1.	Cervix.	"	Died in 8 hours.	Lived.	.....	.....	"
120	Schroeder.	Centralblatt f. Gyn., 1886, p. 10.	Cervix and lower part of uterus.	"	Died in 5 hours, peritonitis.	Dead.	.....	.....	"
121	Möller.	Ibid, 1892, No. 6.	Cervix.	"	Recovered.	Lived.	.....	.....	"
122	Fochier.	Frommel's Jahresbericht, 1889, p. 134.	"	"	Died 4th day peritonitis.	Dead.	.....	.....	"	Operation after 7 days of labor pains.
123	Hernandez.	Ann. de Gyn. et d'Obst., Paris, 1894, xlii., p. 196.	.....	" and by vaginua.	Recovered.	.....	.....	.....	"
7 operators.	.....	.....	8 cases.	.....	3 recov'd. 5 died.	4 recov'd. 3 died. 1 unknown.				

OPERATIONS, INTRA-PARTUM.

TABLE XI.—DELIVERY BY FORCEPS—WITH PREVIOUS OPERATION.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, child.	Recur-rence.	Period of ges-tation.	Diagnosis.	Remarks.
124	Merckel.	Münchener medicin-ische, Wochenschrift, 1889.	Cervix and roof of vagina.	Incisions.	Recovered.	Dead.	Died in two years.	At term	Carcinoma	Severe hemorrhage.
125	Fischer.	Centralbl. f. Gyn., 85, No. 43 (duplicate Case 38, Wendriner's 61 cases).	Portio vag-inalis.	Incisions, bleeding.	Died in 12 hours.	Lived.	.....	"	.....	Severe bleeding.
126	Schroeder.	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	.....	Curetting.	Recovered	Lived.	.....	"	Carcinoma	Puerperal fever.
127	Loehlein.	Centralbl. f. Gyn., 1891, No. 10.	Post. lip, size of goose egg	Forceps, without previous operation	Recovered.	Recovered.	.....	4 weeks before full term.	"	Vaginal hysterectomy during puerperal period; re-covered.
4 operators.	.....	.....	.....	4 cases.	2 recov'd. 1 died.	3 lived. 1 died.	.....	3 at 9 m. 1 at 8 m.	3 carcino. 1 unknown.	

AMPUTATION ANTERIOR LIP (INTRA-PARTUM).

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, child.	Recur-rence.	Period of ges-tation.	Diagnosis.	Remarks.
128	Skutsch.	Sergelken, Jena, 1892.	Cervix.	Amputat'n anterior lip by ligatures & tampon.	Recovered	Mutilated; dead.	.....	Full term.	Carcinoma	Subsequent vaginal hyster-ectomy; recovery.

TABLE XII.—REMOVAL OF TUMORS—INTRA-PERITUM.

No.	Operator.	Bibliography.	Location of tumor.	Means of removal.	Result, mother.	Result, child.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
129	Göner.	Zeitschrift f. Geburtshilfe und Gyn., vol. x, No. 1.	Cervix and vagina.	Spoon, forceps, and galvanocautic.	Recovered.	Recovered.	Died ten months after.	.....	Carcinoma	
130	Göner.	Ibid.	Cervix.	Partial removal before birth; forceps and thermo-caustic.	Recovered.	Dead.	Well two years after.	.....	Carcinoma	
131	Göner.	Ibid.	Cervix and vagina.	Removed before delivery by means of cutting forceps.	Died in 3 mos.	Lived.	.....	.....	Carcinoma	
132	Wiener.	Breslauer ärztliche Zeitschrift, 1880, 4.	Post. lip and roof of vagina (size goose egg)	At full term by thermo-caustic; labor pains three days after.	Lived.	Lived.	Well in four w'ks	.....	Carcinoma cauliflower	
133	Schmitt.	Ärztliches Intelligenz Blatt, 1884, p. 533.	Portio and vagina.	Partial removal, scissors and forceps.	Died.	Lived.	.....	.....	Carcinoma	
3 operators.	.....	.....	.....	5 cases.	3 recover'd 2 died.	4 lived. 1 died.	3 recover'd 2 unknown.	.....	5 carcino.	

TABLE XIII.—INCISIONS OF CERVIX.

No.	Operator.	Bibliography.	Location of cancer.	Incisions.	Result, mother.	Result, child.	Recurrence.	Period of gestation.	No. of hours in labor.	Diagnosis.	Birth.	Remarks.
134	Brandt.	Berlin, 1881.	Cervix, deep.	2 incisions.	Died in 5 weeks.	Dead.	Metastatic formations.	.....	8 days.	Carcinoma.	Spontaneous.	Parametritis; pneumonia.
135	Fischer.	Centralblatt f. Gyn., 1883, No. 43.	Portio vaginalis.	Incisions.	Died in 12 hrs. acute anemia.	Living.	.....	.....	.....	Carcinoma.	Forceps.	
136	Striger.	Correspondenz Aertze, 1888, vol. xviii.	Cervix.	Deep incisions.	Lived.	Twins; lived.	.....	.....	36 hrs.	.....	Turning.	
137	Merckel.	Centralblatt f. Gyn., 1889, No. 44.	Cervix and upper vagina.	Incisions.	Lived 2 years.	Dead.	.....	.....	1½ da's	.....	Spontaneous.	Tampon.
138	.....	Zeitschr. f. Geburtshilfe und Gyn., 1890, vol. xviii.	Cervix, polypus, lower part of cervix gone.	Incisions.	Lived 3½ mos.	Dead.	.....	.....	.....	Carcinoma.	Turning.	Dilation by hand; os rigid; removal; large anterior rupture of cervix; bladder into abdominal cavity; antelexion and compress; Foul-smelling discharge; abscesses.
139	Bousquet.	Centralblatt f. Gyn., 1890, No. 4.	Cervix.	Incisions.	Died in 2 hrs.	Dead.	.....	.....	6 days.	.....	Extraction.	Rupture of lower section of uterus; hemorrhage profuse.
140	Laguel.	Bar Thésis de Paris, p. 195.	Cervix.	Incisions.	Peritonitis; recov.	Dead.	.....	6½ mos	.....	.....	Turning.	
7 operators	.....	.....	.....	7 cases.	5 recov. 2 died.	3 recov. 5 died.	.....	.....	.....	3 carc. 4 unkn.		

TABLE XIV.—MISCARRIAGE, ARTIFICIAL OR INDUCED.

No.	Operator.	Bibliography.	Location of cancer.	Operation.	Result, mother.	Result, foetus.	Recurrence.	Period of gestation.	Diagnosis.	Remarks.
141	Göner.	Zeitschrift f. Geburtsh. und Gyn., vol. x., No. 1.	Cervix.	.....	Recovered.	. . . . .	Conceived and delivered again 3 years later; full term.	4½ mos	Carcinoma	Removed carcinoma, size of hazelnut, seventh day of childbed.
142	Clauss.	Tübingen, 1890.	Vagina and uterus.	.....	Recovered.	.....	.....	6 mos.	.....	Birth spontaneous seventh day; deep rupture of cervix; childbed normal; curette and cautery.
143	Clauss.	Ibid.	Cervix.	.....	Recovered.	Living foetus.	.....	5 mos.	.....	Childbed normal.
144	Floel.	Centralblatt f. Gyn., '91, duplicate 32, Wend- riner's 61 cases.	Cervix (in- cipient).	Perforation of dead child on account of exhaustion.	Recovered.	Dead.	.....	.....	.....	Vaginal hysterectomy in puerperal period.
145	Heilbrunn.	Inaugural Dissertation, Würzburg, 1884.	Cervix and vagina	Perforation of dead child.	Died in 4 weeks of puerperal fever.	Dead.	.....	.....	.....	Fever.
4 operators.	.....	.....	5 cases.	.....	4 recovered 1 died.	2 dead. 1 lived. 2 unkn.	.....	.....	1 carcino. 4 unknown.	

EXPECTANT PLAN OF TREATMENT.

TABLE XV.—SPONTANEOUS EVACUATION OF UTERUS.

No.	Attendant.	Bibliography.	Location of cancer.	Accidents or complications.	Result, mother.	Result, child.	Recur- rence.	Period of ges- tation.	Diagnosis.	Time in labor.	Remarks.
146	.....	Correspond. du Schweizer Aezte, 1890, vol. xx.	Post. lip & right side.	Deep rupture of cervix.	Recov- ered.	.....	In 1 mo	.....	Carcinoma	2½ dys.	Spontaneous birth; cure'ta and cautery; childbed fever.
147	Schroeder.	Zeitschrift f. Geburtshilfe und Gyn., 1892, vol. xxiii.	Pelvic connective tissue.	.....	"	.....	Died in 3 mos.	8 mos.	"	....	Recurrent cancer; ant. lip amputated 4 years before.
148	.....	Ibid.	Portio vaginalis.	.....	"	.....	None.	....	"	....	Died of peritonitis from subsequent vaginal hysterectomy.
149	Salzmann.	Königsberg, 1890.	Cervix and neighboring tissue posteriorly.*	.....	"	Dead (mutilated).	Not observed.	.....	"	4 days.	
150	Brandt.	Berlin, 1881.	Cervix.	Cervix ruptured in six parts by traction on foot.	"	Lived.	None.	.....	"	....
151	Bileted.	Centralblatt f. Gyn., 1884, No. 8.	Cervix.	.....	"	.....	Much worse 2 mislatr	.....	"	.....	Futile attempt to use forceps; turning.
152	Floel.	Coburg, Centralblatt f. Gyn., 1896, No. 32.	Cervix.	Placenta previa.	"	.....	.....	.....	"	.....	Escape of waters five days without labor pains; turning futile; perforation; subsequent amputation and hysterectomy.
153	Döhllein.	Deut. med. Wochenschrift, 1893.	Cervix.	Fever.	"	.....	None.	.....	"	.....	Subsequent vaginal hysterectomy eighteen days.
154	Sorgelken.	Jena, 1893.	Cervix.	.....	"	.....	Died in 18 mos	....	"	.....	Subsequent vaginal hysterectomy; recovery.
155	Heinricius.	Fronmell's Jahressbericht, 1888, p. 126.	Anterior lip (extensive)	.....	"	.....	Died in 18 mos	.....	"	.....	Amputation portio vaginalis, 2½ months later.
156	Perschin.	Ibid, 1890.	Anterior lip	.....	"	.....	In post. lip.	.....	"	.....	Amputation anterior lip; recurrence on posterior lip; vaginal hysterectomy; recovery.

157	Stratz.	Zeitschrift f. Geburtsh. u. Gyn., vol. ix., No. 11.	Cervix.	.....	Recov- ered.	Lived.	Died in 2 mos.	.....	Carcinoma	.....	Supra-vaginal amputation of portio vaginalis.
158	Hooper, J. W. D.	Australian Med. Journ., 1889, N. S. xi., 417-426.	Cervix.	.....	Died next day	Died.	None.	.....	"	.....	.....
159	Stephens, L. P.	Atlanta, Ga. Seen by the writer.	Cervix.	Deep rup- ture of cervix.	Died.	Died.	None.	.....	"	.....	Husband positively forbade any interference.
160	Schroeder.	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	Cervix.	.....	Recov- ered.	Died (mace- rated).	Died in 1 mo.	.....	"	.....	Version and extraction.
161	Coe.	Amer. Journ. Obst., N. Y., 1893, xxvii., 515.	Cervix.	.....	"	Lived.	Recur- rence.	.....	Papilloma.	.....	Vaginal hysterectomy; re- covered.
162	Clauss.	Tübingen, 1896.	Cervix de- stroyed.	.....	"	Living fetus.	.....	5 mos.	.....	29½ hrs	.....
163	Felsenreich.	Weiner medicin. Presse, 1883, p. 34.	Portio vag. size small	.....	"	.....	None in 3 years.	4 mos.	Carcinoma (cauliflower)	.....	Amputation, fifth week af- terward, of portio vagi- nalis.
164	Schroeder.	Ann. de Gyn. et d'Obst., Paris, 1894, xli., p. 187.	Cervix.	.....	"	.....	.....	4 mos.	"	.....	Curette and cautery.
165	Mackenrodt.	Ibid., 1894, pp. 81-97-187- 202.	.....	.....	Died in 3 mos.	Died some days later.	Metas- tatic.	7 mos.	"	.....	.....
166	Mackenrodt.	Ibid. (Hernandez, E.)	Cervix (ex- tensive.	.....	Died in 2 mos.	Died.	Died in 2 mos.	6 mos.	"	.....	.....
18	reporters.	.....	.....	21 cases.	19 rec. 2 died.	5 rec. 5 deaths 11 unkn	.....	.....	16 carcino- mas. 1 papil- loma. 4 unknown.	.....	.....

